

Measuring Program Effectiveness

Monitoring and Tracking Techniques



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The Basics

- ✓ 6217 requires a *strategy* for assessing over time the success of the MMs in reducing pollution loads and improving water quality
- ✓ The strategy should help determine:
 - 1) **The extent to which MMs (including all BMPs) are being implemented**
 - 2) **Whether MMs are being implemented (and inspected and maintained) as designed**
 - 3) **Whether implementation is having effects on water quality**



Monitoring Goals

- ✓ Understand the extent of MM implementation across all MM categories
 - *Where have state/local efforts yielded results?*
 - *Where is 6217 influence limited and why?*
- ✓ Document associations between MM implementation and trends in pollutant loads or water quality by describing the mechanisms thought to be responsible



Suggestions for Action

- ✓ Develop methods to track MM implementation across categories
- ✓ Use the tracking data to estimate load reductions using unit analyses

(e.g., # of Forestry MMs implemented X Estimated Load Reductions = Estimate of Total Load Reduction for Forestry)
- ✓ Partner with other (water quality) agencies to determine how best to use their data
- ✓ Focus on gathering and using valid data to assess implementation effectiveness at appropriate scale



Suggestions for Action

- ✓ Use a pilot project to assess the implementation, operation and maintenance for your priority MM(s)
- ✓ Utilize available load reduction estimates for BMPs to calculate the overall pollutant reduction impact of 6217
- ✓ Become a player during the development of state, regional, and targeted monitoring programs



Questions of Scale

- ✓ Since the CNPP provides limited new funding for monitoring efforts, states must call upon existing sources of data at varying scales:
 - *Site specific assessments at the field or plot level*
 - *Watershed assessments to determine the cumulative effects of implementing MMs and/or BMPs*
 - *Statewide inventories of MM implementation*



Why Monitor and Track?

- ✓ Determine if implementation is occurring
- ✓ Identify changes in the extent to which MMs are being implemented
- ✓ Determine the need to promote or induce the use of MMs
- ✓ Compare the effectiveness of alternative BMPs
- ✓ Establish reference points for compliance
- ✓ Determine whether landowners and industry are aware of and following guidance
- ✓ Evaluate the effectiveness of 6217 in improving water quality and protecting human health



Summary

- ✓ 6217 does not *require* implementation monitoring, however without it, program managers will have difficulty determining the difference the program is making
- ✓ Start with an assessment of actions being taken - what is the extent of MM implementation?
- ✓ Rely on partner agencies for MM effectiveness data and tracking of implementation activities
- ✓ Progress toward a valid method for connecting MM implementation to changes in environmental conditions